



Appendix B.5

WCDMA Band V



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1. Effective (Isotropic) Radiated Power Output Data

1.1 Test Result

ANT1

Band	Channel	Power(dBm)	ERP(dBm)	Limit(dBm)	Verdict
Band V	4132	23.16	23.57	38.45	PASS
Band V	4182	23.33	23.74	38.45	PASS
Band V	4233	23.15	23.56	38.45	PASS



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2. Frequency Stability

2.1 Band V

2.1.1 Test Result

Band V							
Network	Frequency (MHz)	Temp. (°C)	Voltage (VDC)	Freq. Error (Hz)	Freq. vs. Rated (ppm)		Verdict
					Result	Limit	
RMC	826.4	20	3.8	-1.147	-0.0014	-2.5 to 2.5	Pass
			4.0	-1.966	-0.0024	-2.5 to 2.5	Pass
			4.2	-2.795	-0.0034	-2.5 to 2.5	Pass
		-30	4.0	-1.735	-0.0021	-2.5 to 2.5	Pass
		-20	4.0	-1.654	-0.0020	-2.5 to 2.5	Pass
		-10	4.0	-0.751	-0.0009	-2.5 to 2.5	Pass
		0	4.0	-1.724	-0.0021	-2.5 to 2.5	Pass
		10	4.0	-0.907	-0.0011	-2.5 to 2.5	Pass
		30	4.0	-1.299	-0.0016	-2.5 to 2.5	Pass
		40	4.0	-1.542	-0.0019	-2.5 to 2.5	Pass
		50	4.0	-1.066	-0.0013	-2.5 to 2.5	Pass
	836.6	20	3.8	-0.674	-0.0008	-2.5 to 2.5	Pass
			4.0	0.080	0.0001	-2.5 to 2.5	Pass
			4.2	-0.534	-0.0006	-2.5 to 2.5	Pass
		-30	4.0	-0.564	-0.0007	-2.5 to 2.5	Pass
		-20	4.0	-2.124	-0.0025	-2.5 to 2.5	Pass
		-10	4.0	-0.101	-0.0001	-2.5 to 2.5	Pass
		0	4.0	-0.689	-0.0008	-2.5 to 2.5	Pass
		10	4.0	-0.683	-0.0008	-2.5 to 2.5	Pass
		30	4.0	-1.771	-0.0021	-2.5 to 2.5	Pass
		40	4.0	-0.172	-0.0002	-2.5 to 2.5	Pass
		50	4.0	-1.096	-0.0013	-2.5 to 2.5	Pass
	846.6	20	3.8	0.451	0.0005	-2.5 to 2.5	Pass
			4.0	0.067	0.0001	-2.5 to 2.5	Pass
			4.2	1.568	0.0019	-2.5 to 2.5	Pass
		-30	4.0	0.592	0.0007	-2.5 to 2.5	Pass
		-20	4.0	-1.181	-0.0014	-2.5 to 2.5	Pass
		-10	4.0	-0.274	-0.0003	-2.5 to 2.5	Pass
		0	4.0	-0.237	-0.0003	-2.5 to 2.5	Pass
		10	4.0	0.725	0.0009	-2.5 to 2.5	Pass
		30	4.0	0.468	0.0006	-2.5 to 2.5	Pass
		40	4.0	0.177	0.0002	-2.5 to 2.5	Pass
		50	4.0	0.879	0.0010	-2.5 to 2.5	Pass



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3. 99% & 26dB Bandwidth

3.1 Band V_OBW

3.1.1 Test Result

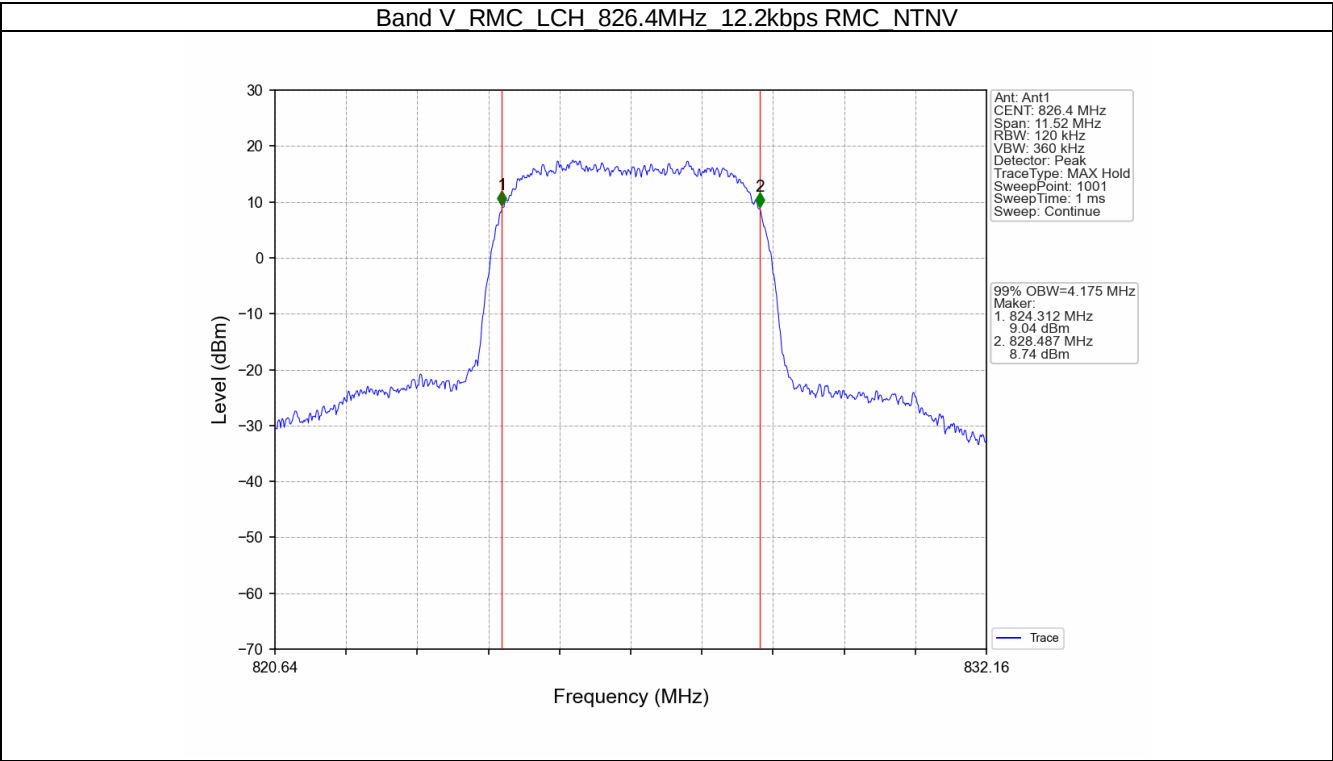
Band V						
ENV	Mode		Frequency (MHz)	99% Occupied Bandwidth (MHz)		Verdict
	Network	Subset		Result	Limit	
NTNV	RMC	12.2kbps RMC	826.4	4.175	/	Pass
			836.6	4.154	/	Pass
			846.6	4.166	/	Pass



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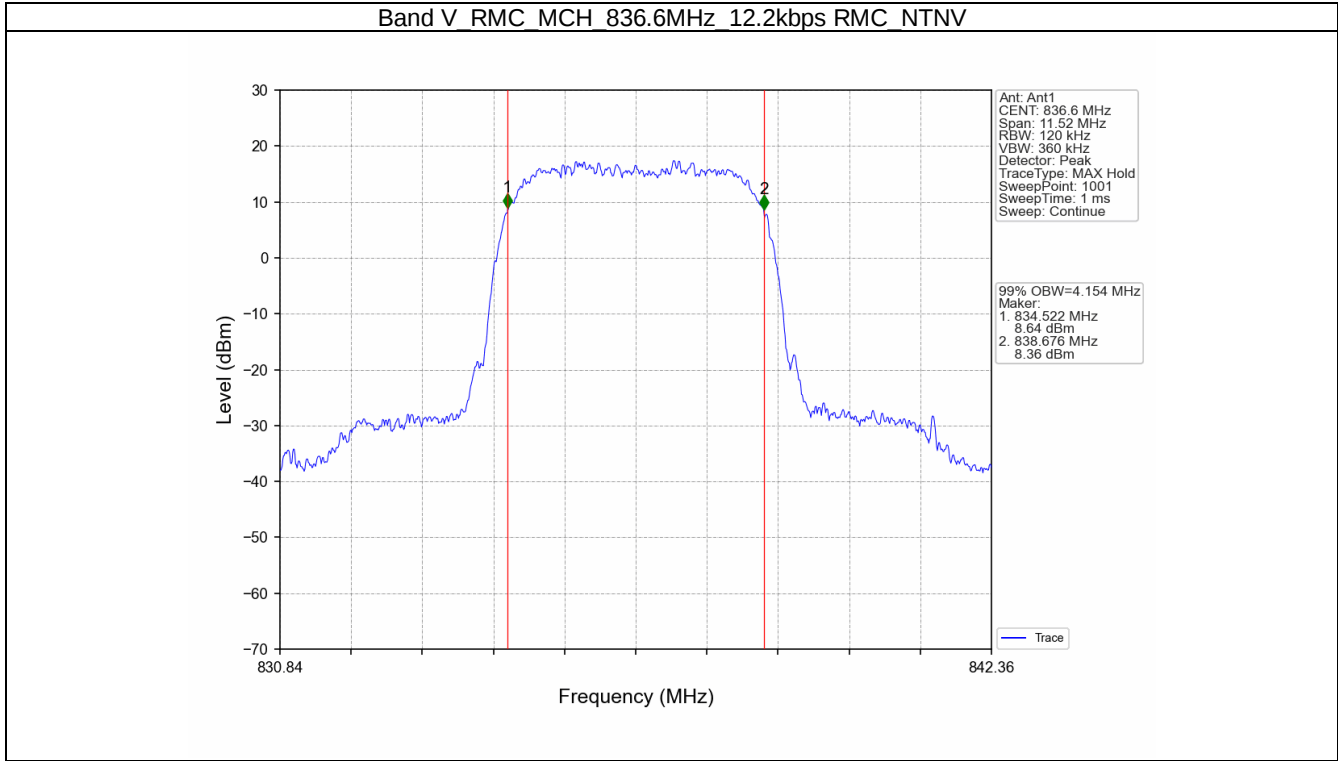
3.1.2 Test Graph





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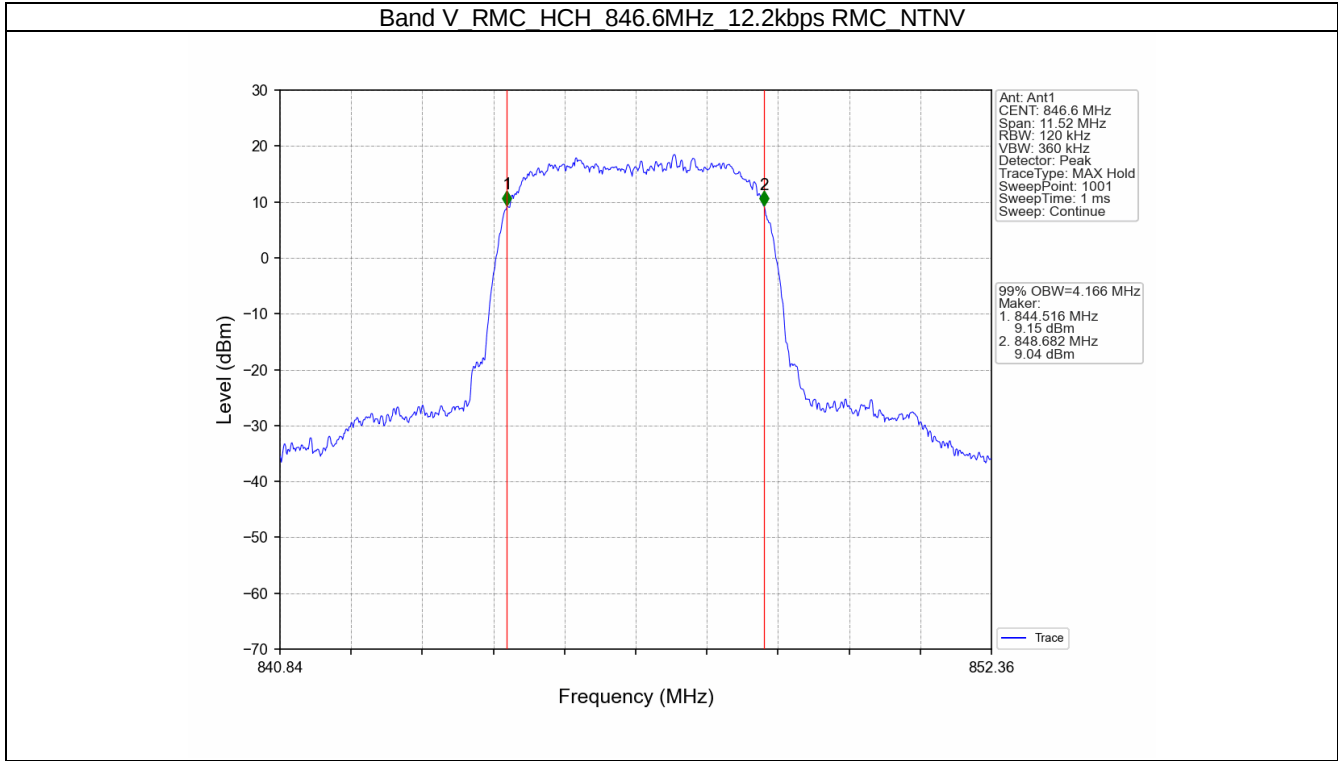
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3.2 Band V_XDB

3.2.1 Test Result

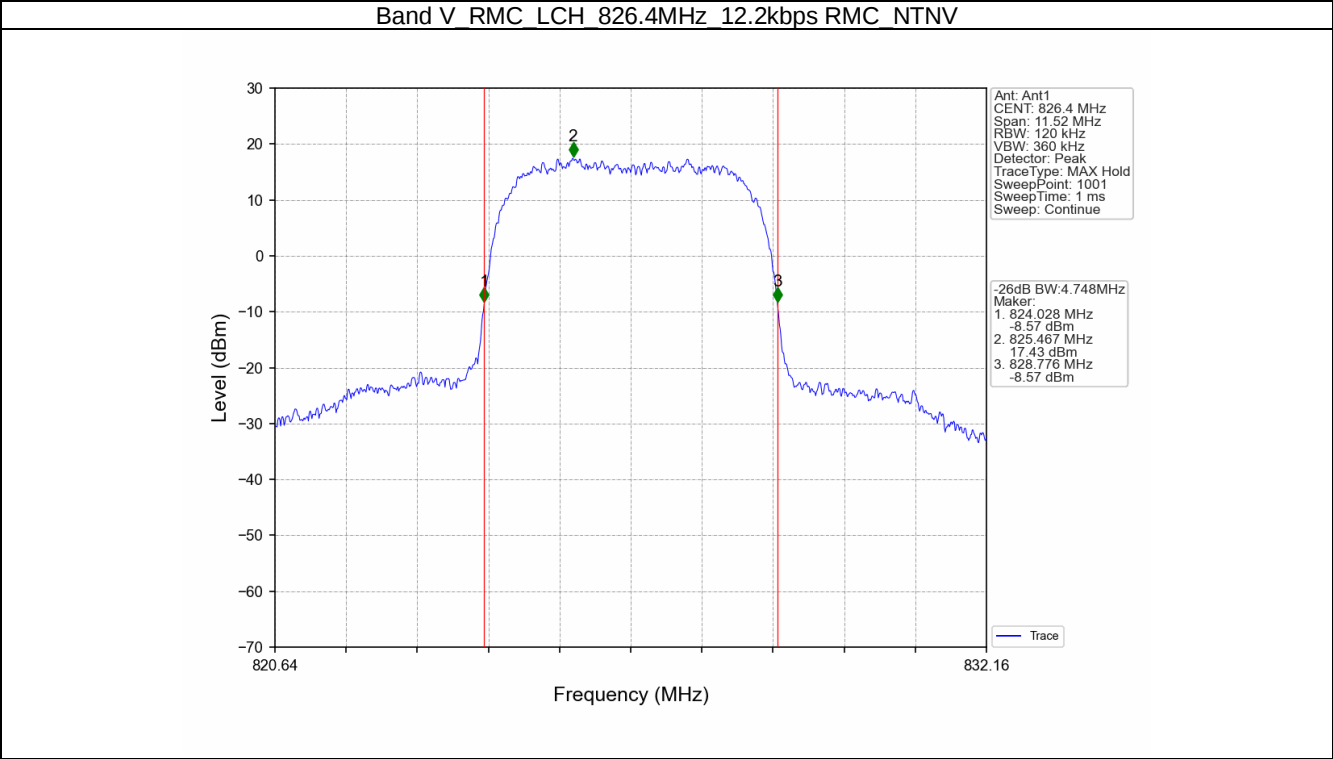
Band V						
ENV	Mode		Frequency (MHz)	26dB Bandwidth (MHz)		Verdict
	Network	Subset		Result	Limit	
NTNV	RMC	12.2kbps RMC	826.4	4.748	/	Pass
			836.6	4.745	/	Pass
			846.6	4.731	/	Pass



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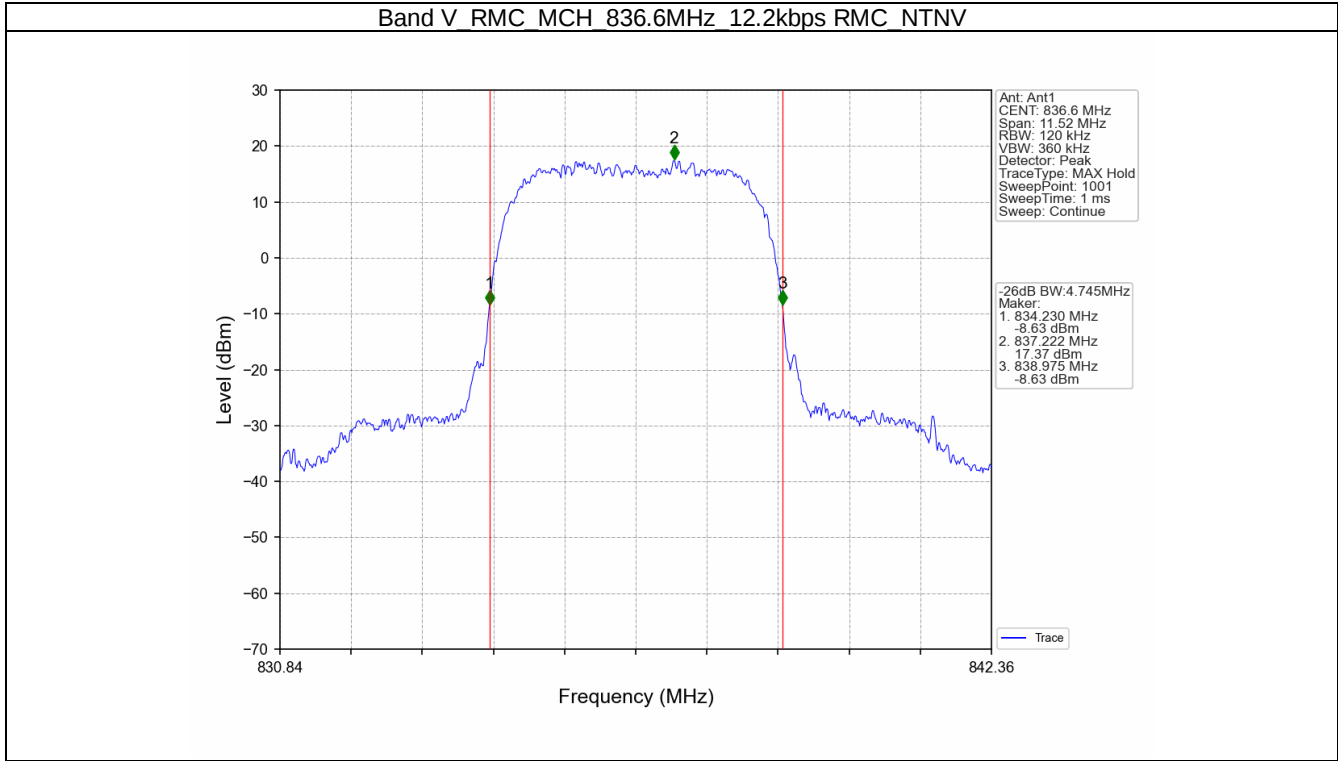
3.2.2 Test Graph





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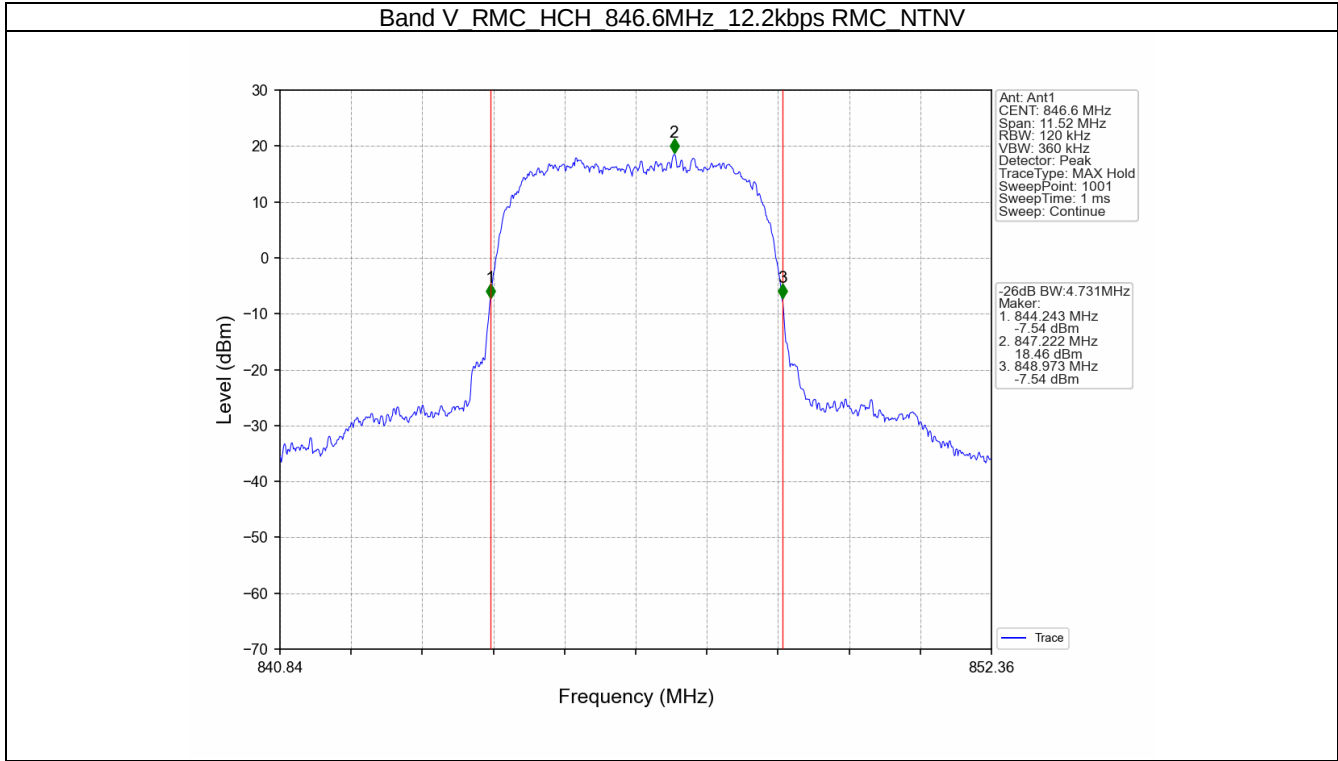
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4. Peak-Average Ratio

4.1 Band V

4.1.1 Test Result

Band V						
ENV	Mode		Frequency (MHz)	Peak-Average Ratio (dB)		Verdict
	Network	Subset		Result	Limit	
NTNV	RMC	12.2kbps RMC	826.4	2.76	<=13	Pass
			836.6	3.00	<=13	Pass
			846.6	2.98	<=13	Pass

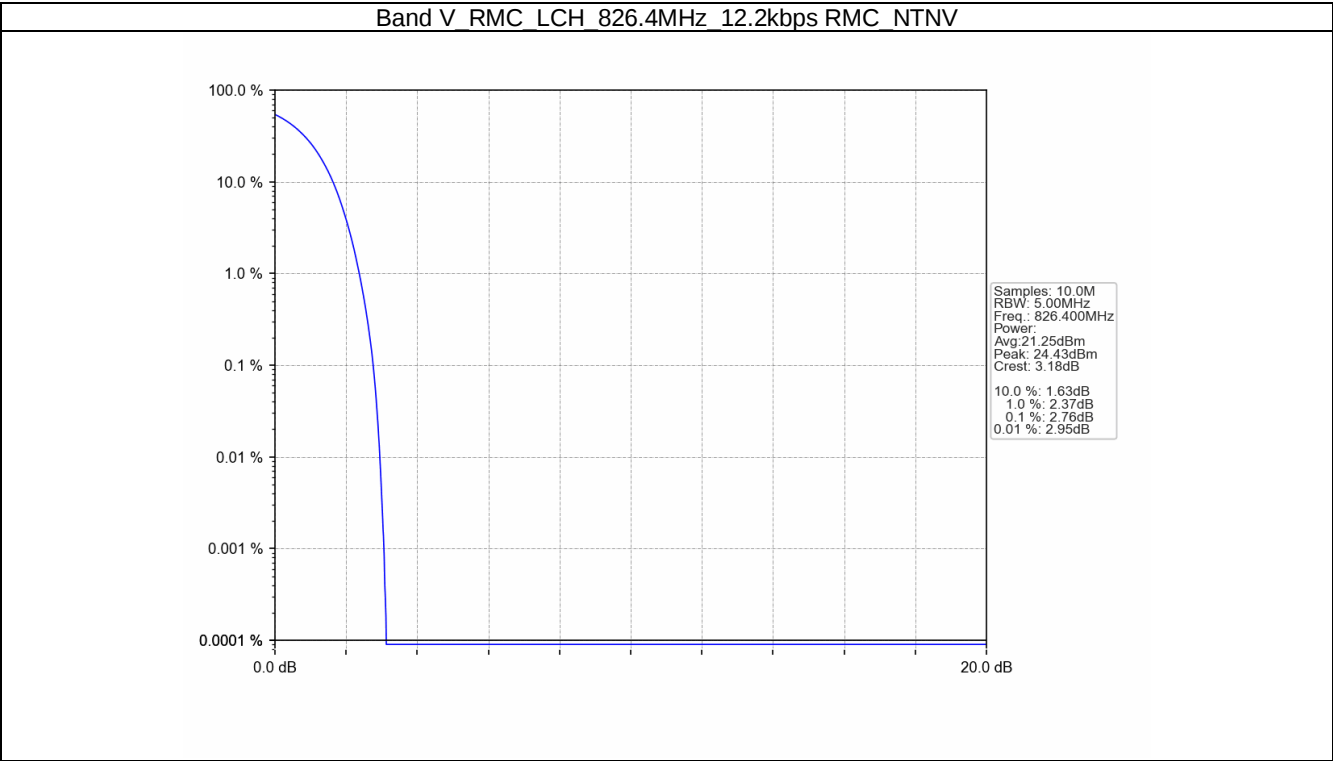


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4.1.2 Test Graph

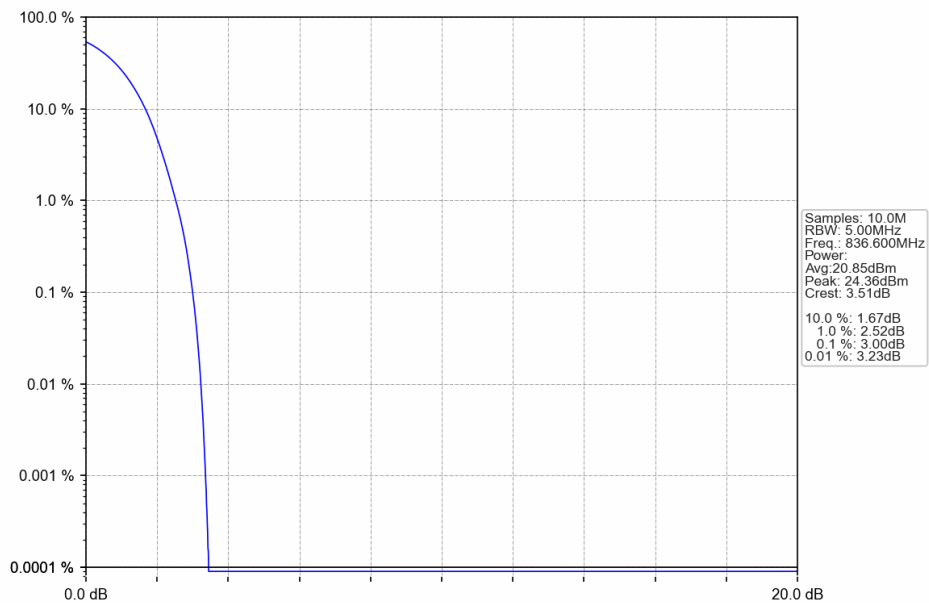




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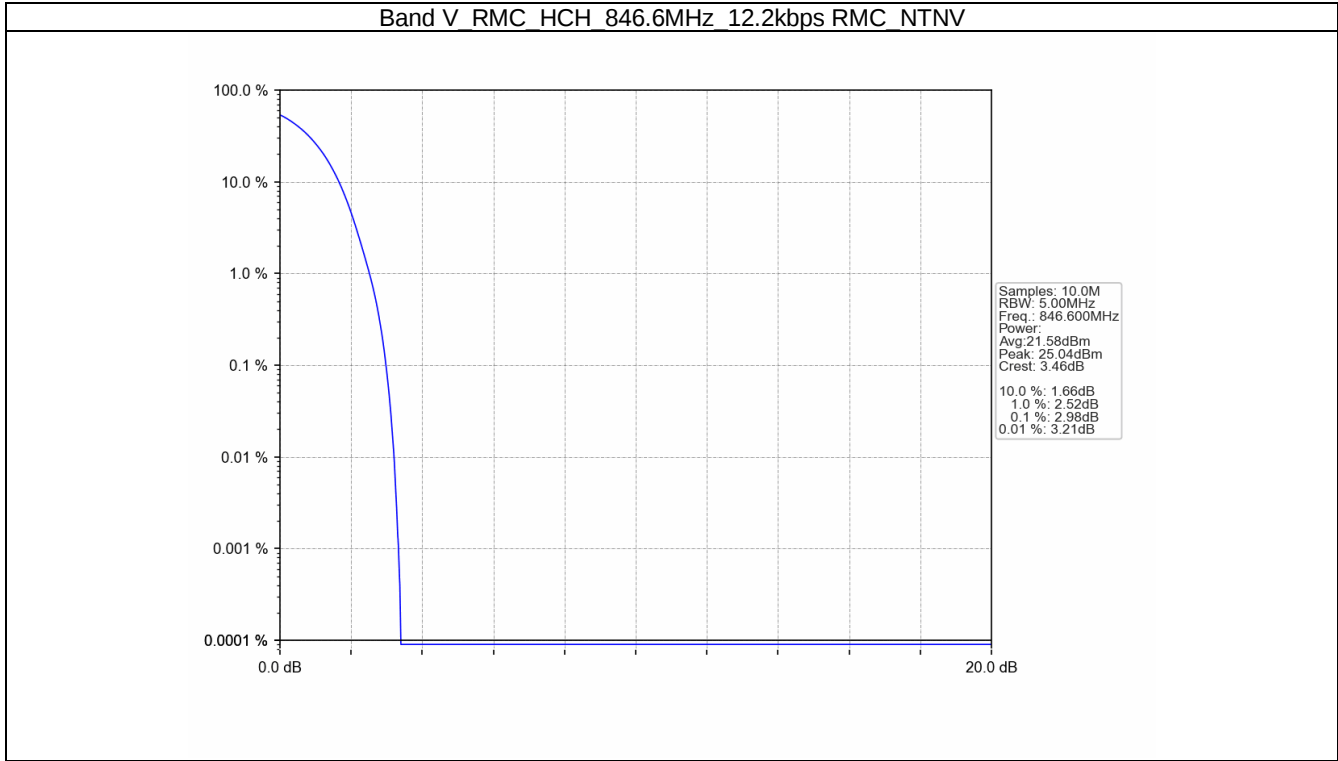
Band V RMC MCH 836.6MHz 12.2kbps RMC NTNV





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5. Spurious Emission & Band Edges

5.1 Band V

5.1.1 Test Result

Band V					
ENV	Mode		Frequency (MHz)	Spurious Emission	
	Network	Subset		Result	Limit
NTNV	RMC	12.2kbps RMC	826.4	Refer To Test Graph	Pass
			836.6	Refer To Test Graph	Pass
			846.6	Refer To Test Graph	Pass

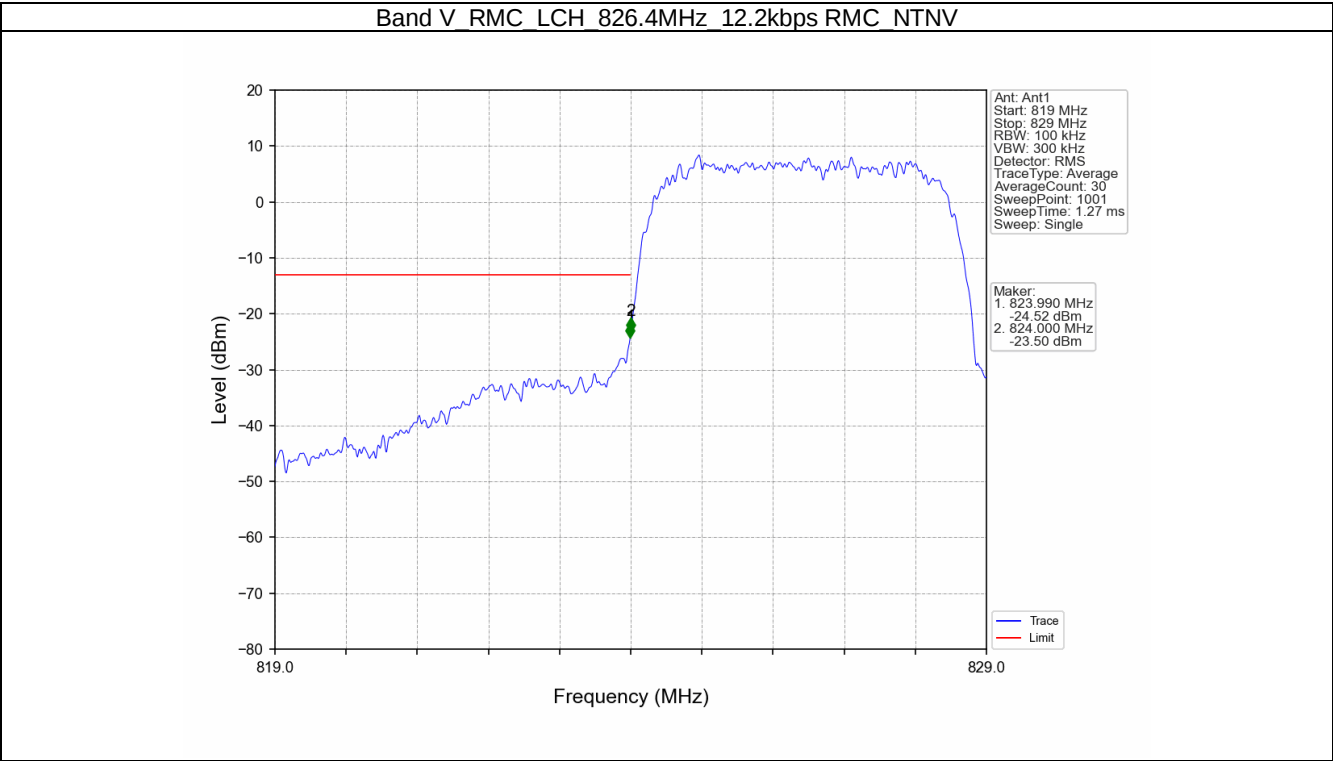


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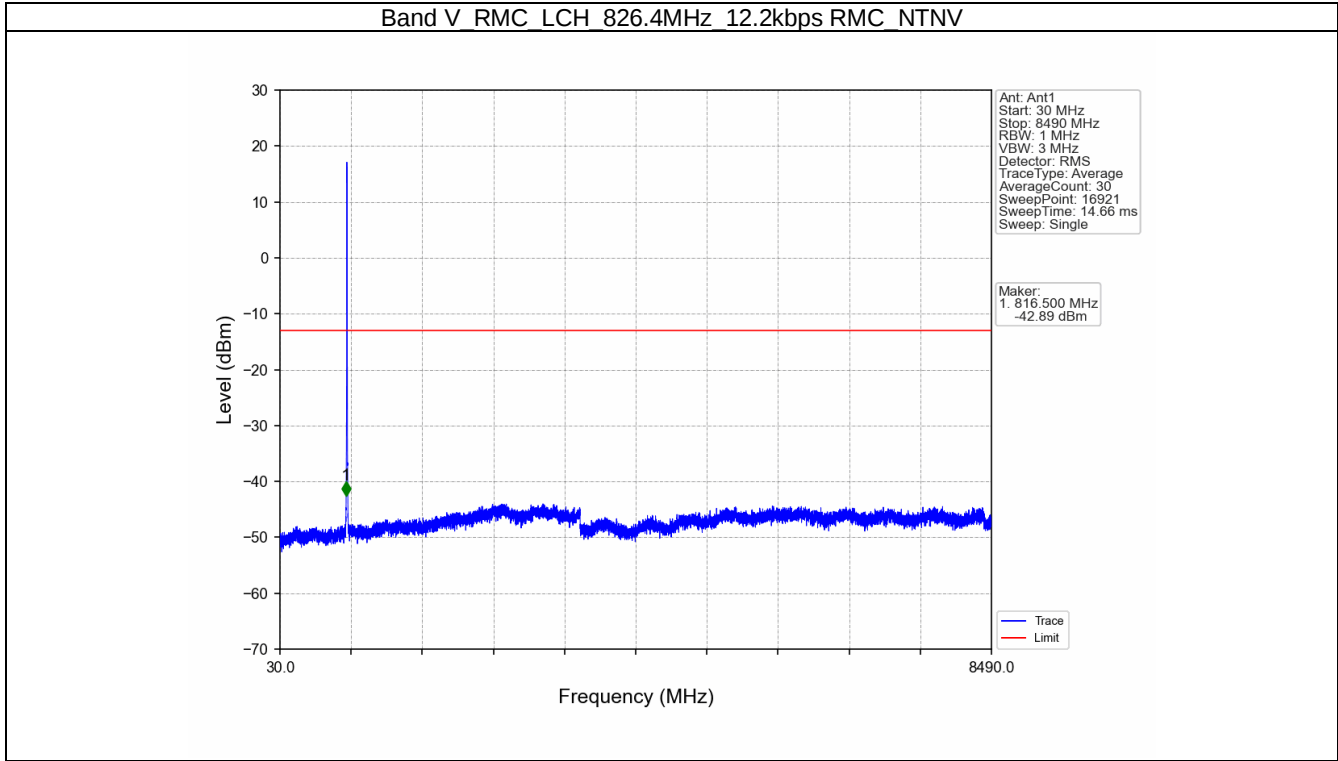
5.1.2 Test Graph





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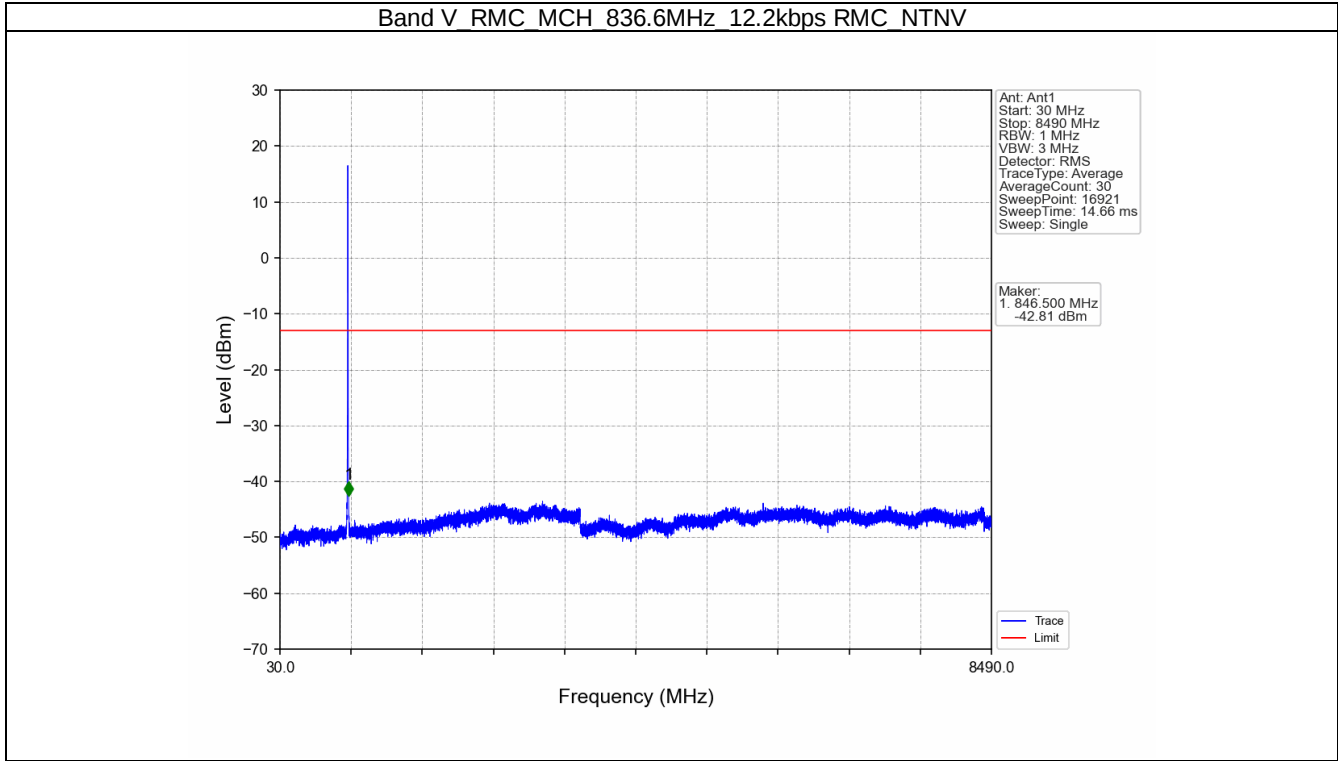
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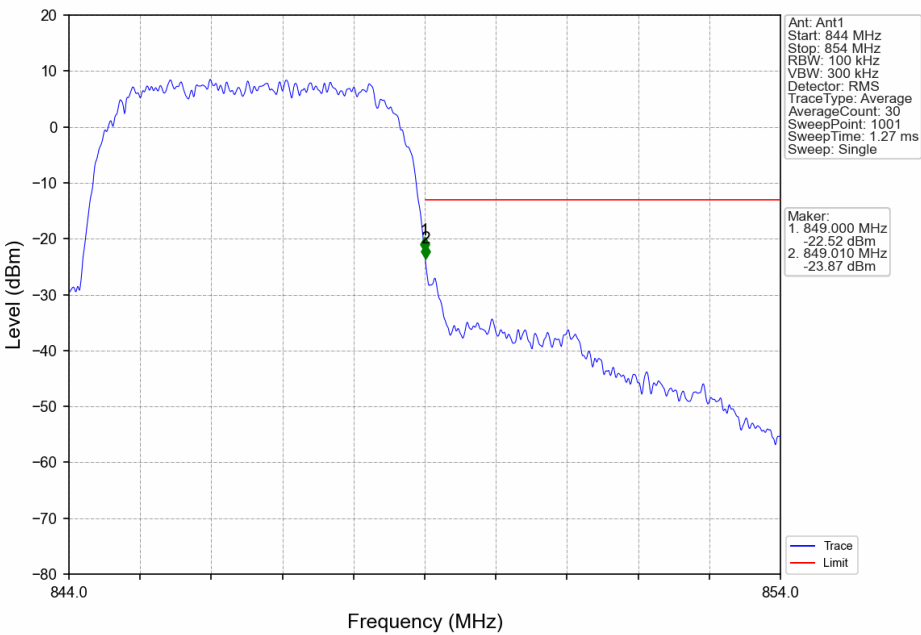




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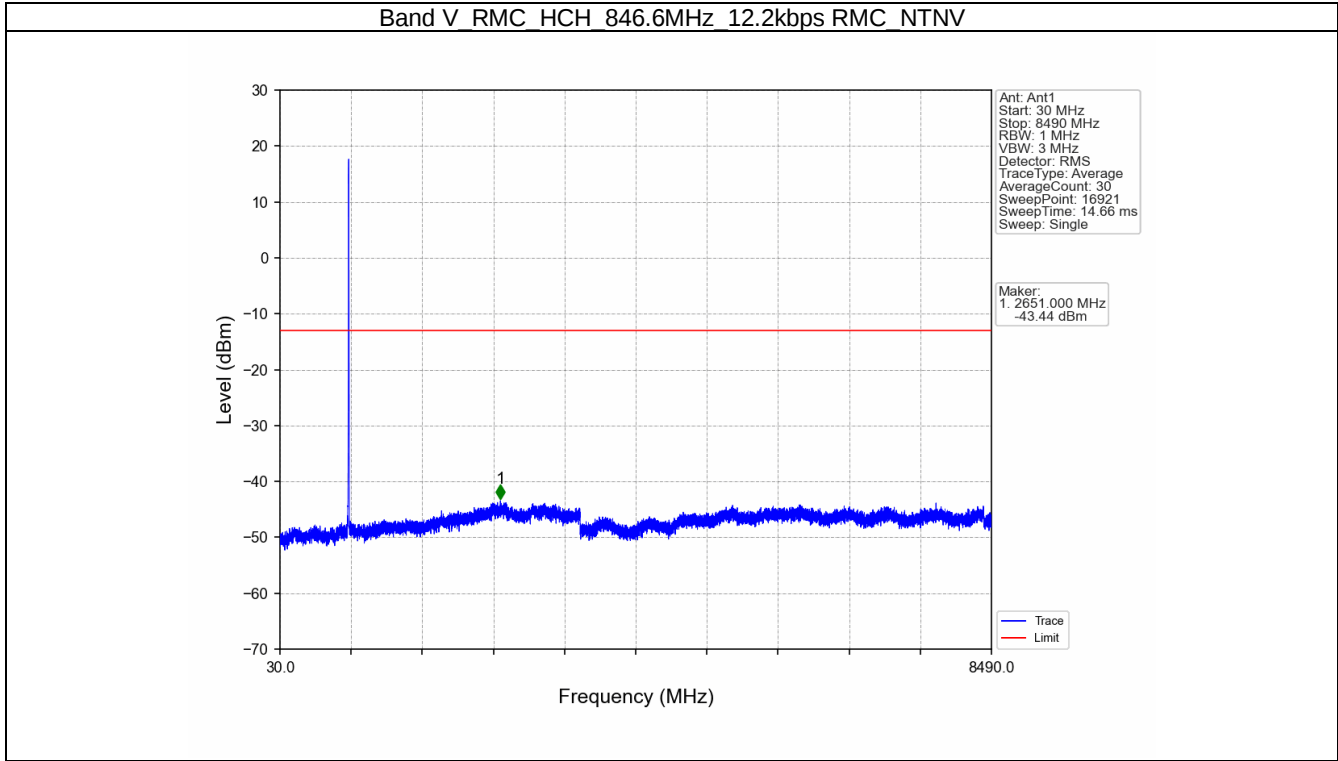
Band V RMC HCH 846.6MHz 12.2kbps RMC NTN





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6. Field Strength of Spurious Radiation

Test Band = WCDMA Band V_ TM1

Test Channel = Low

Final Data List								
NO.	Frequency [MHz]	Reading [dBμV]	Factor [dB]	AF[dB/m]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity
1	1652.8000	43.74	-48.22	25.28	-74.46	-13.00	61.46	Horizontal
2	2479.2000	42.78	-47.31	27.24	-72.54	-13.00	59.54	Horizontal
3	3305.6000	42.19	-46.67	28.48	-71.26	-13.00	58.26	Horizontal
4	4132.0000	40.27	-45.92	29.42	-71.49	-13.00	58.49	Horizontal
5	4958.4000	40.96	-45.72	31.31	-68.71	-13.00	55.71	Horizontal
6	5973.7143	41.17	-44.57	32.69	-65.97	-13.00	52.97	Horizontal

Final Data List								
NO.	Frequency [MHz]	Reading [dBμV]	Factor [dB]	AF[dB/m]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity
1	1652.8000	43.33	-48.22	25.28	-74.87	-13.00	61.87	Vertical
2	2479.2000	42.67	-47.31	27.24	-72.65	-13.00	59.65	Vertical
3	3305.6000	42.15	-46.67	28.48	-71.30	-13.00	58.30	Vertical
4	4132.0000	40.92	-45.92	29.42	-70.84	-13.00	57.84	Vertical
5	4958.4000	40.81	-45.72	31.31	-68.86	-13.00	55.86	Vertical
6	6709.7143	39.89	-44.07	34.68	-64.76	-13.00	51.76	Vertical



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Test Band = WCDMA Band V _ TM1

Test Channel = Mid

Final Data List								
NO.	Frequency [MHz]	Reading [dBμV]	Factor [dB]	AF[dB/m]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity
1	1672.8000	43.18	-48.19	25.31	-74.96	-13.00	61.96	Horizontal
2	2509.2000	42.92	-47.24	27.32	-72.26	-13.00	59.26	Horizontal
3	3345.6000	41.69	-46.62	28.51	-71.68	-13.00	58.68	Horizontal
4	4182.0000	40.04	-45.95	29.54	-71.63	-13.00	58.63	Horizontal
5	5018.4000	40.01	-45.73	31.45	-69.53	-13.00	56.53	Horizontal
6	7005.7143	39.58	-43.61	35.22	-64.07	-13.00	51.07	Horizontal

Final Data List								
NO.	Frequency [MHz]	Reading [dBμV]	Factor [dB]	AF[dB/m]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity
1	1672.8000	43.23	-48.19	25.31	-74.91	-13.00	61.91	Vertical
2	2509.2000	42.80	-47.24	27.32	-72.38	-13.00	59.38	Vertical
3	3345.6000	42.44	-46.62	28.51	-70.93	-13.00	57.93	Vertical
4	4182.0000	39.82	-45.95	29.54	-71.85	-13.00	58.85	Vertical
5	5018.4000	40.18	-45.73	31.45	-69.36	-13.00	56.36	Vertical
6	6044	40.32	-44.54	32.84	-66.64	-13.00	53.64	Vertical



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Test Band = WCDMA Band V _ TM1

Test Channel = High

Final Data List								
NO.	Frequency [MHz]	Reading [dBμV]	Factor [dB]	AF[dB/m]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity
1	1693.2000	43.73	-48.17	25.34	-74.36	-13.00	61.36	Horizontal
2	2539.8000	42.46	-47.13	27.38	-72.55	-13.00	59.55	Horizontal
3	3386.4000	41.89	-46.56	28.53	-71.40	-13.00	58.40	Horizontal
4	4233.0000	40.70	-45.90	29.66	-70.80	-13.00	57.80	Horizontal
5	5079.6000	39.16	-45.47	31.59	-69.97	-13.00	56.97	Horizontal
6	7800	38.75	-42.59	36.72	-62.38	-13.00	49.38	Horizontal

Final Data List								
NO.	Frequency [MHz]	Reading [dBμV]	Factor [dB]	AF[dB/m]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity
1	1693.2000	43.28	-48.17	25.34	-74.81	-13.00	61.81	Vertical
2	2539.8000	42.23	-47.13	27.38	-72.78	-13.00	59.78	Vertical
3	3386.4000	41.67	-46.56	28.53	-71.62	-13.00	58.62	Vertical
4	4233.0000	40.67	-45.90	29.66	-70.83	-13.00	57.83	Vertical
5	5079.6000	39.48	-45.47	31.59	-69.65	-13.00	56.65	Vertical
6	7231.4286	39.37	-43.74	35.85	-63.79	-13.00	50.79	Vertical

Remark:

1) The field strength is calculated by adding the Antenna Factor, Cable Factor & AMP. The basic equation with a sample calculation is as follows:

AF = Antenna Factor(dB/m)

Factor = Cable Factor(dB) - Preamplifier (dB)

Level = Reading Level + AF + Factor -95.26

Margin = Limit – Level

---End of Attachment---